

I CLAIM:

1. A data transmission system having distributed control functionality for use in machines having control functional units, said system comprising a networked movement control system which controls complex processes, wherein information relating to movement control can be interchanged by means of real-time cross-communication between the control functional units.
2. The data transmission system according to claim 1, wherein the real-time cross-communication can be carried out using Ethernet links.
3. The data transmission system according to claim 1, wherein the control functional units can be synchronized by means of Ethernet real-time cross-communication.
4. The data transmission system according to claim 1, wherein data and synchronization signals from drive regulators can be interchanged with an associated control functional unit using Ethernet real-time communication.
5. The data transmission system according to claim 1, wherein the machine is a printing machine.